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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,545	03/10/2005	Rolf Mueller	F-8596	7168

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EXAMINER

TRAN LIEN, THUY

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,545

Applicant(s)

MUELLER ET AL.

Examiner

Lien T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,6,8-13,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,6,8-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The amendment filed 6/20/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The insertion of Table 1 on page 29, Table 2 on page 30 and Table 3 on page 32 in the substitute specification is new matter because they were not present in the original disclosure. There is no translation of the foreign application; thus, it cannot be determined if the tables are the same as the ones in the foreign application.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claims 15-16, 3,6,8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 16, applicant claims a method for manufacturing food which comprises the steps of converting NS starch into a state of largely released crystallization potential, converting a VS1 starch into a solution or melt, manufacturing a molecularly disperse mixture of NS and VS1 and initiating a net work by homo and/or heterocrystallization. However, the specification does not teach how these steps are carried out. For instance, how is NS starch converted to state of largely released crystallization potential or how is a molecularly disperse mixture created. The specification does not teach any processing parameters to carry out these steps. Applicant also claims food product

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containing the starch network; however, there is no teaching of how this starch network is obtained. Thus, applicant has not disclosed an enabling disclosure.

Claims 15-16, 3,6, 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15: Line 1, the phrase " and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). Line 2, the phrase " a disperse phase" is indefinite because it is not clear what this is referred to and it is a disperse phase of what? Lines 7-8, it is not clear what is meant by " at least once in a state of largely released crystallization potential". Line 9, what does " molecularly disperse manner" mean? The scope of the claim cannot be determined.

In claim 16: Line 2, the phrase " and the like" has the same problem as claim 15. Step a has the same problem as lines 7-8 of claim 15. Steps c,d have the same problem as line 9 of claim 15. Step e is vague and indefinite because it is not clear what the step encompassed; what is being done and how it is being done. What does applicant mean by homo and/or heterocrystallization. Step f is vague and indefinite because it is not known what is being conditioning and/or drying; is this the starch matrix or the food. The claim is also indefinite in that it is not commensurate with the preamble which recites a method for manufacturing a food. It is not known how the

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food is manufactured and how the matrix is related to the making of the food. The claim is also vague and indefinite in that it is not known how the steps recited are carried out.

Claim 3 is vague and indefinite because it is not clear what the disperse phase is.

In claim 6: Part C, the phrase "in particular" is indefinite because it is not known how this is related to the limitation recited; in particular what?

In claim 8: Lines 2,4, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Line 4, the phrase "this phase" is indefinite because it is not known what phase the claim is referring to.. Line 5, the phrase "interpenetrating networks" is indefinite because it not known what networks the claim is referred to and what does interpenetrating mean? The structure claimed is not clear.

In claim 9: A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131

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USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). The broad ranges followed by narrower ranges of the days, tensile strength, elasticity modulus and solubility are indefinite for reason just cited. The phrase "in particular" has the same problem as in lines 2,4 of claim 8. What does applicant mean by "in absence of nuclei"? How does such feature related to the food product. Line 3, the phrase "excess water" is indefinite because it is relative; what would be considered as excess water?

Claim 10 has the same problem as claim 9. Furthermore, it is not clear what the numbers indicate; 3 what?

Claim 11 has the same problem as claim 10.

Claim 12 has the same problem as claim 8 with regard to the use of the phrase "in particular".

Claim 13 has the same problem as claim 9.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-16, 3, 6,8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Zallie et al.

The claims are indefinite and vague for the reason set forth in the 112 rejection. The structure and processing steps as claimed are indefinite; it is not clear what the exact nature of the structure of the food product is and the exact processing steps are.

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To the best interpretation, the claims are directed to food product comprising a starch matrix of three types of starches. The process is directed to the making of a food product by mixing the three types of starch with flour or starch or grits.

Zallie et al disclose a process of making foods such as pasta, desserts, noodles, batter-fried foods et... The process of making the food comprises the step of adding to the foods a mixture of spray-dried, non-granular starch, spray-dried, uniformly gelatinized starch in the form of granular indented spheres and enzymatically debranched, gelatinized starch comprising at least 40% amylose. The starches are dispersed in liquids slowly, with mixing or other shearing so they are uniformly wetted and do not lump. The starch may be derived from plant source having about 40-100% amylose. The starch is enzymatically treated to cleave the branch points on the amylopectin molecule to yield a mixture of short chain amylose and partially debranched amylopectin. The soluble high amylose starches can be used in foods alone or in combination with starches other than high amylose starches. The foods are subjected to cooking. The soluble amylose starch is present in the foods in the range of up to about 95% and the level of starch in the blend is in the range of 10-90%. (see col. 3 lines 48-60, col. 4 lines 6-40, col. 7 lines 25-57 and claim 1.)

Zallie et al disclose food made of starch, flour because they disclose other starches can be used in addition to the mixture of high amylose starches. Foods such as pasta, noodles, batter-fried food also inherently contain flour. Zallie et al disclose a combination of three starches including branched starch and having the amylose content as claimed. The foods disclosed in Zallie et al are the same foods and

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containing the same starches as claimed; thus, it is inherent the food will have the same starch matrix and disperse phase as claimed. The starches will have the same crystallization potential as claimed. The food products inherently have the properties as in claims 9-13. Zallie et al disclose the method as in claim 16 because the starches are subjected to mixing, shearing and heating and the different starches are mixed as claimed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mizoguchi et al., Sarneel and Villagran et al disclose food products containing mixture of starches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 20, 2008

Lien Tran
LIEN TRAN
PRIMARY EXAMINER
Group 1700